

NIKHENSON, A.G., kand.med.nauk

Some data on the physiology of the acoustic analyzer. ~~Zhur.ush.~~,
nos.1 gorl.bol. 22 no.4:88-91 J1-4g '62. (MIRA 1642)
(ACOUSTIC NERVE)

NIKOLSON, I. F.

25876 NIKOLSON, I. F. Collection of photographs. (Soviet). II.
I. F. Nikolson I B. N. Paskinskiy. Voprosy - Krasnaya Zvezda, 1974, No. 1,
S. 15-16

See: Interim Summary, No. 2, 1974, 1 of 1

NIKHINSON, I.M.
25876

O Leptospiroznykh Zabolevaniyakh Soobshch. II I.M. Nikhinson I B.N. Pakhinskiy.
Voyen.-Med. Zhurnal, 1948, No.6, S. 45-49

SO: LETOPIS NO. 30, 1948

NIKHINSON, I.M., podpolkovnik meditsinskoy sluzhby; LEV, A.S., podpolkovnik
meditsinskoy sluzhby

Some data on the role of the water factor in the epidemiology of
dysentery. Voen.-med. zhur. no.4:59-60 Ap '56. (MLRA 9:9)
(WATER--BACTERIOLOGY) (DYSENTERY)

NIKHINSON, I. M.

"Collection of Air Samples With the Help of a Filter Cartridge and Gas Mask to Detect Microflora," by I. M. Nikhinson, I. A. Katsnel'son, and R. D. Gorodetskiy, Voyenno-Meditsinskiy Zhurnal No 11, Nov 56, pp 54-55

"We proposed and tested the filter cartridge of a filtering gas mask to simplify the method of collecting air samples, especially under field conditions, for the purpose of observing microorganisms, rickettsiae, and viruses in the samples.

"The filter cartridge is a tin cylinder 1.8 cm in diameter and 2.5 cm high. The bottom of the cylinder has 10-20 openings. The other end is open.

"On the interior surface of the grid of the cartridge, a pad consisting of six layers of gauze is closely compressed by a bottomless cylinder 4.5 cm high which is set inside the first cylinder (the dimensions of the cartridge can be varied depending on the size of the openings in the casing of the gas mask). The converted filter cartridge is wrapped in paper or placed in a metal or wooden covering and sterilized.

54M-1345

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"Before collection of air samples, the sterile cartridge, removed from the paper, is set into the opening in the bottom of the gas mask housing. From 5 to 6 minutes after use of the gas mask with the filter cartridge has begun, the cartridge is removed and taken into a bacteriological laboratory. Smears are prepared from the suspension obtained by washing the six-layer gauze with physiological solution; seeding and infection of animals are carried out with the suspension.

"We conducted 95 bacteriological analyses of air in rooms of the barracks. Samples were taken while the barracks was occupied. Air was simultaneously investigated by D'Yakanov's method. A D'Yakanov flask was connected to the gas mask. A gas meter permitted us to establish the fact that a man in a gas mask equipped with a filter cartridge inhales 6 liters of air per minute. The same volume of air is inhaled if a D'Yakanov flask is attached to the gas mask. One ml of suspension was seeded on a Petri dish containing agar. The seedings afforded the growth of microorganisms encountered in the air (Sarcina, Staphylococcus, gram-positive bacilli, molds, and fungi).

"The same microorganisms were isolated from the air with the filter cartridge as were isolated when samples were collected with the D'Yakanov flask. In 22 air samples, the quantity of microorganisms was found to be greater on collection with the filter cartridge; in 53 samples, the quantity was only slightly greater than that found in samples collected by the D'Yakanov method; in 20 samples, analogous results were obtained.

54M.1345

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Fifteen air samples were taken in the barracks immediately after the personnel had arisen, and the same number were taken after the quarters had been ventilated. Ventilation decreased the microbial content of the air in the barracks 2-2.5 times.

"With the help of the filter cartridge the unit physician can check the ventilation in the barracks. The simplified method of collecting air samples can be employed for determining the species content of the microflora. We investigated the air in a laboratory box after dispersing a suspension of *Staphylococcus aureus* and intestinal bacilli in it. These microorganisms always infected the gauze packing of the filter. The filter cartridge can also be used expediently under field conditions in cases where rapid collection of air samples for detecting microflora is required." (U)

Sum. 1345

Country : USSR

E

Category: Virology. Viruses of Man and Animals. Rickettsias.

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103590

Author : Nikhinson, I.M.; Kanbur, I.D.; Savchenko, E.N.

Institute : -

Title : "Q" Fever in Sakhalin

Orig Pub: Zh. mikrobiol., epidemiol. i immunobiol., 1958, v 3, No 2, 51-54.

Abstract: No abstract.

Card : 1/1

KRICHEVSKIY, A.Yu.; MIKHINSON, I.M.

A case of ornithosis. Vrach.delo no.2:191 F '59.

(MIRA 12:6)

1. Klinika infektsionnykh bolezney (zav. - prof.I.R.Braude
[deceased]) Khar'kovskogo meditsinskogo instituta i oblastnaya
sanitarno-epidemiologicheskaya stantsiya.
(ORNITHOSIS)

NIKHINSON, I.M.; DOBRAYA, T.Ye.; YASHEK, Kh.N.

Virological and serological features of the influenza outbreak in
Kharkov and districts of Kharkov Province in the first quarter of
1959. Vop. virus. 5 no. 6:751 N-D '60. (MIRA 14:4)
(KHARKOV PROVINCE—INFLUENZA)

NIKHINSON, I.M.; BASKOVICH, TS.L.; SHVETS, TS.I.

Method for the bacteriological study of convalescents and those who have had dysentery. Lab. delo 7 no.12:36-37 D '61.

(MIRA 14:11)

1. Khar'kovskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya (glavnyy vrach I.I.Chernov).
(DYSENTERY)

ACC NR: AP6031640

(A)

SOURCE CODE: UR/0240/66/000/009/0080/0081

AUTHOR: Nikhinson, I. M.; (Candidate of medical sciences; Khar'kov);
Gorodetskaya, V. M. (Khar'kov); Kurasova, Zh. V. (Khar'kov)

ORG: none

TITLE: Phage typing pathogenic staphylococci

SOURCE: Gigiyena i sanitariya, no. 9, 1966, 80-81

TOPIC TAGS: staphylococcus, pathogen, phage, typing, diagnostic medicine,
bacteriology, bacteriophage

ABSTRACT: Staphylococci isolated from human feces were phage typed into
three basic groups and then into subgroups. This method was
compared with results of standard tests and found to be faster
and more accurate.

[WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 29Jan66/ ORIG REF: 004/

Card 1/1

UDC: 576.851.252.06.077.5

AUTHOR NIKHINSON L.M., Chief Bureau of Mechanisation PA - 3060
TITLE Mechanisation of work intensive processes.
 (Mekhanisatsiya trudoyemkikh protsessov.- Russian)
PERIODICAL Metallurg 1957, Vol 2, Nr 4, pp 29 - 30 (USSR)
 Received: 5/1957 Reviewed: 7/1957
ABSTRACT The circumstance that future mechanisation was not taken into account when the Kuznetsk Metallurgical Combine was built makes this mechanisation extremely difficult. Nevertheless, much progress has been made in the postwar years. 982 different measures made it possible to withdraw and use otherwise about 3000 workers and to make easier the work of 5000 others. A reserve of performance increase is the cutting of the time of furnace lay-offs at repairs. Here it was possible by mechanisation and better organisation to save about 4.5 days per blast furnace. The Martin furnaces have the shortest interruptions in their work in the entire USSR. The workers of the coke furnaces showed much zeal and initiative in finding a special mechanised settler for the exchange of the mountings of the regenerators of the coke furnaces without interrupting the operation of the furnaces. Nevertheless much still has to be done. The plants and the specialised institutes must work out efficient methods of cooling the furnaces after they have

CARD 1/3

Mechanisation of work intensive processes.

PA - 3060

been laid off. Many interesting devices have been introduced in the rolling mills of the Combine: manipulatory rulers with pneumatic drive at the lifting platforms of the fine staging of the plate-rolling mill, mechanical edgers for semifinished material and ingots, etc. Many stages of production formerly were bottlenecks because they had to be done manually. Under difficult conditions of the plant which was under continuous operation the conveyance of rails to the counter sink was mechanised (by means of tractors and roll tables) resulting in the availability of 112 workers of other purposes and in an increase of the performance by 50 %. Simultaneously the weight of the rails was increased to 75 kg per running meter. Nevertheless, a complete modernisation of the rolling trains still is lacking. Loading and unloading are already highly mechanised. In order to make a mechanisation in the transport division possible, the depots for raw materials and fuel had to be reconstructed, new types of wagons had to be created and old ones rebuilt. The degree of mechanisation rose to 94 %. But even here many things still have to be done. At present, mechanisation of the work in the forehearth trench of the blast furnace is under

CARD 2/3

NIKHINSON, Yu.I., inzh.; TESLENKO, L.F., inzh.

Preparing the welding wire for welding in carbon dioxide.

Svar. proizv. no.6:39 Je. '63.

(MIRA 16:12)

1. Khar'kovskiy traktorosbornochnyy zavod.

ZOGRAFKI, Str.; NIKHTIANOV, Khr.; DASHEV.G.

Successful surgery of a case of pheochromocytoma. Khirurgiia
(Sofia) 16 no.10:959-961 '63.

1. Iz katedrite po bolnichna khirurgiia i po endokrinologiya
i bolesti na obmianata pri ISUL, Sofia.

GRUNER, Matilda, inz.; NIKIC, Milutin, inz.; FILAJDIC, Mirko, dr.inz.

Color of nitrosomyoglobin during the processing of frankfurters.
Kem ind 12 no.9:665-669 S '63.

1. Biotehnoski odjel, Tehnoski fakultet, Zagret.
2. Clan Redakcionog odbora, "Kemija u industriji" (for Filajdic).

S/076/63/037/001/011/029
B101/B186

AUTHORS: Kondrat'yev, V. P., Nikich, V. I. (Moscow)
TITLE: Electrical conductivity of aqueous solutions of alkaline earth chlorides at high temperatures

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 100-105

TEXT: The data on the electrical conductivity κ of aqueous solutions of $MgCl_2$, $CaCl_2$, and $SrCl_2$ in molal concentrations of 0.05 - 1.0 m and 0.5 m $BaCl_2$ at 25 - 300°C, which so far have not been published, were calculated and are here tabulated. At rising temperature κ was found to pass a maximum. $\kappa = A c^k \exp \left[B(T_{max} - T)^2/T \right]$, where c is the molal concentration, and A , B , k are empirical constants, is valid in the above range of temperatures and concentrations. The occurrence of κ_{max} at a certain temperature is explained by the assumption that the dissociation of the electrolytes decreases as the temperature increases. At lower temperatures the salts are completely dissociated, their κ depends on the

Card 1/2

Electrical conductivity of aqueous ...

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radius of the solvated ion, i. e. on its mobility, and forms the sequence $Mg^{2+} < Ca^{2+} < Sr^{2+} < Ba^{2+}$. The mobility increases and the amount of the dissociated ion decreases as the temperature rises. Hence, κ_{max} occurs at a certain temperature. Besides, hydrolysis takes place at high temperatures causing the appearance of highly mobile H^+ ions. The sequence $MgCl_2 > CaCl_2 > SrCl_2 > BaCl_2$ holds for κ at 0.05 m, owing to the different tendency of the studied alkaline earth compounds to hydrolyze. There are 6 figures and 4 tables.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut im. D. I. Mendeleeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleev)

SUBMITTED: September 27, 1961

Card 2/2

NIKICH, V.I.; GORBACHEV, S.V.

Specific gravity of electrolyte solutions in anhydrous acetic acid at high temperatures. Trudy MKHTI no.44:41-44 '64.

(MIRA 18:1)

Specific conductivity of electrolyte solutions in anhydrous acetic acid at high temperatures. Ibid.:45-49

KORST, N.N.; NIKICH-KRILICHEVSKIY, O.A.

Relaxation equations for the magnetic moment of a bound spin system. Teoret. i eksper. khim. i no.4:505-510 '65.

(MIRA 18:10)

1. Institut khimicheskoy fiziki AN SSSR, Moscow.

NIKIEL, Nikodem

Histoplasmosis. Polski tygod. lek. 11 no.3:126-130
16 Jan 56.

1. Z II Oddz. Chorob Wewnet. I.D.S. K.L. w Warszawie.
kier. prof. dr. med. Walenty Hartwig, Wągrowiec, ul.
Jednosc 8 m. 1.

(HISTOPLASMOSIS
review.

NOWAK, Karol, mgr inz.; WILCZYNSKA, Jadwiga, inz.; NIKIEL, Stefan

Biuret as an impurity in fertilizing urea. Chemik 16 no.7/8:
189-192 J1-Ag '63.

1. Zaklady Azotowe, Kedzierzyn.

COMMON ELEMENTS		COMMON SYMBOLS		COMMON ABBREVIATIONS		COMMON UNITS		COMMON FORMATS		COMMON NOTATION		COMMON REFERENCES		COMMON INDEXES		COMMON CROSS-REFERENCES		COMMON FOOTNOTES		COMMON APPENDICES		COMMON BIBLIOGRAPHY		COMMON CITATIONS		COMMON QUOTATIONS		COMMON EPIGRAPHS		COMMON DEDICATIONS		COMMON ACKNOWLEDGMENTS		COMMON PREFACES		COMMON INTROS		COMMON CONCLUSIONS		COMMON REMARKS		COMMON COMMENTS		COMMON NOTES		COMMON ADDENDA		COMMON CORRIGENDA		COMMON SUPPLEMENTS		COMMON GLOSSARIES		COMMON ACRONYMS		COMMON INITIALS		COMMON NUMERALS		COMMON ALPHABETS		COMMON SCRIPTS		COMMON LANGUAGES		COMMON DIALECTS		COMMON ACCENTS		COMMON PUNCTUATION		COMMON GRAMMAR		COMMON SYNTAX		COMMON SEMANTICS		COMMON PRAGMATICS		COMMON PHILOLOGY		COMMON LINGUISTICS		COMMON ANTHROPOLOGY		COMMON SOCIOLOGY		COMMON POLITICAL SCIENCE		COMMON ECONOMICS		COMMON HISTORY		COMMON GEOGRAPHY		COMMON PHYSICS		COMMON CHEMISTRY		COMMON BIOLOGY		COMMON MEDICINE		COMMON LAW		COMMON THEOLOGY		COMMON PHILOSOPHY		COMMON PSYCHOLOGY		COMMON EDUCATION		COMMON ARTS AND CRAFTS		COMMON RECREATION		COMMON SPORTS		COMMON MUSIC		COMMON VISUAL ARTS		COMMON LITERATURE		COMMON JOURNALISM		COMMON COMMUNICATIONS		COMMON TRANSPORTATION		COMMON ENGINEERING		COMMON TECHNOLOGY		COMMON ENVIRONMENTAL SCIENCES		COMMON SOCIAL SCIENCES		COMMON HUMANITIES		COMMON INTERDISCIPLINARY STUDIES		COMMON EMERGING FIELDS		COMMON SPECIALIZED AREAS		COMMON NICHES		COMMON SUBFIELDS		COMMON SUBSUBFIELDS		COMMON MICROFIELDS		COMMON NANOFIELDS		COMMON PICOFIELDS		COMMON FEMTOFIELDS		COMMON ATTOFIELDS		COMMON ZEPTOFIELDS		COMMON YOTAFIELDS		COMMON RONTAFIELDS		COMMON PLANCKFIELDS		COMMON BOSEFIELDS		COMMON EINSTEINFIELDS		COMMON HEISENBERGFIELDS		COMMON SCHRÖDINGERFIELDS		COMMON DIRACFIELDS		COMMON FERMIFIELDS		COMMON GAUGEFIELDS		COMMON GRAVITATIONAL FIELDS		COMMON ELECTROMAGNETIC FIELDS		COMMON STRONG NUCLEAR FIELDS		COMMON WEAK NUCLEAR FIELDS		COMMON STANDARD MODEL FIELDS		COMMON BEYOND STANDARD MODEL FIELDS		COMMON DARK MATTER 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Massacutes boiling with hot air. S. Nishit. Can. Sugarbeet 80, 223-6 (1950).—Expts. on variations of Morse's process of blowing hot air into massacutes during evapn., for heating and for promoting circulation, are described. A coil of hot-air distribution pipes was placed in the (lowered) bottom of the evaporator, under the calandria; the pipes were flattened in the vertical plane, with holes (3 mm. in diam.) on either side, 0.25 in. from the bottom edge, to prevent choking by sugar and to facilitate cleaning by steam; the air was blown in at 0.2-0.4 atm. over atm. pressure through a horizontal tube heater and a tank where steam could be introduced at will; further details of the equipment are given. Heating by hot air only at atm. pressure gave good circulation, doubled the vol. of the massacutes owing to foaming, and caused premature crystallization (after 2 hrs. 40 min. at 84° Brix and 1.33 supernatn.), attributed to nucleation by fine crystals in the entering air; to prevent over-rapid evapn. and the formation of false grains, steam was then blown in with the air for 2 hrs.; evapn. was slower than normal, but the mass dropped easily, and the crystals were of good quality (90% 0.5-1.3 mm. in size). With initial normal vacuum-pan boiling, followed by hot-air blowing at atm. pressure, low-grade bollings gave a molasses of 65 purity on centrifuging, without the use of mixers; analytical data are tabulated; foam formed under these conditions was very persistent in the massacutes and in the run-off sirup, and interfered with sampling for analysis; de-aeration was difficult, even under vacuum; foaming was least troublesome with low-grade bollings; the use of larger evaporators and mixers to allow for foaming is suggested. Oxidation of the sugars and nonsugars gave a pleasant vanilla-like odor to the massacutes, sirup, and molasses, which decreased on storage of the massacutes. The heat balance in the process is discussed. B. A.

NIKIEL, S.

A quick and simple method for invert-sugar estimation.
Stanislaw Nikiel. *Gas. Chymiczna* 57, 51-2 (1955).
The method is based upon one previously described by Main a
(*Intern. Sugar J.* 34, 213, 400 (1932)) which utilizes reduc-
tion of $K_2Fe(CN)_6$ in an al. medium. Methylene blue is
used as indicator. Less than 0.3% invert sugar can be
detd. in refined sugar.

A. H. Koffler

PM
2/25/55

4000

NIKIEL STANISLAW

POLAND/Chemical Technology. Chemical Products and Their Application.
Carbohydrates and Refinement.

H-26

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 15912

Author : Nikiel Stanislaw

Inst :

Title : What Is New in the Chemistry of Saccharose and Non-Sugars.

Orig Pub: Gaz. cukrown., 1956, 58, No 10, 229.

Abstract: Brief information concerning the possibility of obtaining from sugar various derivatives which can be utilized as detergents, emulsifying agents, plastics and explosives. A brief description of the methods of production and principal characteristics of the following: acetyl saccharose, allyl saccharose, sorbitol, mannitol, betaine, riboflavin, levulinic acid, etc.

Card : 1/1

WILCZYŃSKA, Jadwiga // inż., NIKIEL, Stefan

Remarks on the possibility of producing plant growth regulators.
Chemik 13 no.1:28-29 Ja '65.

1. Nitrogen Works II, Kedzierzyn.

NIKIEL, T.

Modernization of steam turbines. p. 236.

ENERGETYKA, Vol. 9, No. 5 Sept./Oct. 1955

(Ministerstwo Energetyki) Stalinogrod.

SOURCE: EAST EUROPEAN ACCESSIONS LIST Vol. 5, No. 1 Jan. 1956

NIKIEL, Tadeusz

Turbiny Parowe (Steam Turbines). Warsaw: Państwowe Wydawnictwa Techniczne, 1957.

55M/6
667.13
.N6

JEDYNAK, Mieczyslaw, inz.; RUBASZOWSKI, Tadeusz, inz.; BIALY, Adam, inz.
BOTWINA, Mieczyslaw, inz.; MARTEJA, Ludwik, inz.; NIKIEL,
Tadeusz, inz.; LIZEWSKI, Wacław, inz.

Increasing the maximum power of 55 MW Skoda steam turbines during the peak period by 3 MW, during 3 hours, for each turbine. Increasing the maximum power of 20 MW Alsthom steam turbines during the peak period by 1 MW, during 3 hours, for each turbine. Gosp paliw 11 Special issue no.(95):58 Ja '63.

1. Elektrownia Stalowa Wola.

SAPOZHNIKOVA, S.A.; MEL', M.I.; SMIRNOVA, V.A.; NIKIFONOVA, A.T.

Evaluating the climatic and agricultural resources of the U.S.S.R.
Trudy NIIAK no.2:78-115 '57. (MIRA 11:9)
(Crops and climate)

NIKIFORENKO, N., mayor tekhnicheskoy sluzhby

Automatic-control attachment. Voen.vest. 43 no.10:94-95 0
'63. (MIRA 16:12)

AUTHOR: Nikiforenko, N.N.

SOV/68-58-10-6/25

TITLE: A Universal Automatic Sampling Installation for Coke and Coal (Universal'nyy avtomaticheskii probirator koksa ili uglya)

PERIODICAL: Koks i Khimiya, 1958, Nr 10, pp 19 - 20 (USSR)

ABSTRACT: An automatic sampling installation for coke and coal taking samples from a stream of material falling from a conveyor belt by diverting the falling material at pre-determined time intervals into a sampling vessel is described and illustrated. The sampling installation and its electrical scheme are shown in Figures 1 and 2, respectively. It is claimed that the installation operates on the Kharkov Coking Works with satisfactory results. There are 2 figures.

ASSOCIATION: Khar'kovskiy koksokhimicheskiy zavod (Kharkov Coking Works)

Card 1/1

GESTRIN, N.P. [Hestryn, N.P.]; NIKIFORENKO, V.A. [Nykyforenko, V.A.]

Improving the production of polyacrylamide in the Mizoch and Sambor
sugar factories. Kharch.prom. no.4:16-20 O-D '63. (MIRA 17:1)

L 06590-67 EWT(d)/EWT(m)/EWP(w)/EWP(j)/EWP(t)/EWT/EWP(k) IJP(c) JD/EM/RM/JH
 ACC NR: AP6029852 (N) SOURCE CODE: UR/0032/66/032/008/0962/0965

AUTHOR: Budenkov, G. A.; Nikiforenko, Zh. G.; Shkol'nik, I. E.

ORG: All-Union Scientific Research Institute for the Development of Nondestructive
 Methods and Means of Controlling the Quality of Materials (Vsesoyuznyy nauchno-issle-
 dovatel'skiy institut po razrabotke nerazrushayushchikh metodov i sredstv kontrolya
 kachestva materialov)

TITLE: An estimate of the stress state of a material with the aid of ultrasound

SOURCE: Zavodskaya laboratoriya, v. 32, no. 8, 1966, 962-965

TOPIC TAGS: stress analysis, ultrasonic wave, ultrasonic wave propagation, anisotropic
 medium, elasticity theory, elastic stress

ABSTRACT: A method was developed for determining the mechanical stress in solid bodies
 according to their anisotropic parameters. Third-order nonlinear elastic equations
 were given relating stress to deformation and to the speed of three-dimensional shear
 waves. The latter equations showed that in the presence of stress, solid bodies are
 governed by anisotropic elasticity. The experimental and theoretical dependence be-
 tween elastic stresses and the shear parameters of elastic oscillations in various ma-
 terials was developed from the frequency ultrasonic polarization method of measuring
 internal stresses in solids. Elastic anisotropy was determined by measuring the fre-

Card 1/2

UDC: 620.179.16

L 06590-67
ACC NR: AP6029852

quency. The emitter and receiver were positioned so that the direction of the oscillation feed would remain at an angle of $\pi/4$ with the principle plane. In this case, the amplitude of electrical oscillations impinging on the receiver varied according to a cosine law. The change in frequency for a constant path length of elastic oscillations in anisotropic media is given as a function of the relative change in velocity of the shear wave ($\Delta v/v_s$). A block diagram of the experimental apparatus is given. Testing was done on samples of organic glass, a D16T aluminum alloy, and fine-grained concrete. Prismatic samples were compressed; the amplitude-frequency characteristics and the relative change in shear wave velocity are given as a function of the axial stress. From these, the third order constants A and B were determined, where $A = -(\Delta v/v_s \cdot 8\mu^2/\sigma + 4\mu)$. The dependence of $\Delta v/v_s$ on stress is linear and is represented by the equation

$$\Delta v/v_s = \sigma/8\mu^2 (4\mu + A).$$

The relative error in the method was 2-3%. The cause of anisotropy was preferred orientation due to rolling. Orig. art. has: 4 figures, 9 formulas.

SUB CODE: 11,20/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 005

Ultrasonic Applications 18

Card 2/2 LS

ACC NR: AP6021473

SOURCE CODE: UR/0413/66/000/011/0094/0094

INVENTOR: Zhuravel', V. I.; Minakov, V. I.; Bobrov, V. T.; Dimitraki, P. N.; Niki-forenko, Zh. G.; Budenkov, G. A.; Gitia, M. B.

ORG: None

TITLE: An ultrasonic pulse-shadow immersion flaw detector. Class 42, No. 182390 [announced by the All-Union Scientific Research Institute of Nondestructive Methods for Material Quality Control (Vsesoyuznyy nauchno-issledovatel'skiy institut neraz-rushayushchikh metodov kontrolya kachestva materialov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 94

TOPIC TAGS: flaw detection, ultrasonic flaw detector, quality control

ABSTRACT: This Author's Certificate introduces: 1. An ultrasonic pulse-shadow immersion flaw detector which contains an ultrasonic probe unit, line scanning mechanism, oscillator and ultrasonic amplifier. The unit is designed for increased productivity in checking parts of complex shape. The installation incorporates an electronic unit which generates a control signal after the ultrasonic probe unit passes beyond the outline of the part being checked. This signal controls the line scanning mechanism and temporarily disconnects the receiving head from the amplifier. 2. A modification of this flaw detector in which the electronic unit is made in such a

Card 1/2

UDC: 620.179.16.C8

ACC NR: AP6021473

way that when there is a single pair of ultrasonic probes in the installation the receiver head is disconnected from the amplifier during the period when the probe unit is returning to the article being checked. 3. A modification of this flaw detector in which the electronic unit is made in such a way that when there are two pairs of ultrasonic probes located one behind the other along their line of motion in the installation, the receiver head disconnected from the amplifier is the one which first passes beyond the outline of the part being checked. This receiver head is connected when the second pair of probes passes beyond the outline of the part on the return travel of the probe unit.

SUB CODE: 09, 13/ SUBM DATE: 07Dec64

Card 2/2

NIKIFOROV, A., laureat Gosudarstvennoy premii

Attention, toxic chemicals! Okhr. truda i sots. strakh. 7 no.2:28
F '64. (MIRA 17:2)

L 54849-65

ACCESSION NR: AP5014673

UR/0348/65/000/006/0004/0025
632.952

AUTHORS: Korolev, P. (Engineer, Chemist); Nikiforov, A. (Agronomist)

TITLE: Promising fungicides

SOURCE: Zashchita rasteniy ot vreditel'ey i bolezney, ¹⁰no. 6, 1965, 24-25

TOPIC TAGS: agriculture, fungus, fungicide

ABSTRACT: In recent years the MSKh SSSR State Committee for chemical means of controlling agricultural pests, diseases, and weeds has tested foreign and domestic fungicides. It recommends the release of the following types. N-trichloromethylthiotetrahydrophthalamide, 2,3-dichloro-naphthoquinone-1,4-, mercurohexane (1% ethylmercurochloride, 20% hexachlorobenzene, 12% gamma isomer GKhtsG, and 67% filler), phthalane (the active part of N-trichloromethylthiophthalamide), copper oxychloride, zinc ethylenebisdithiocarbamate, and zinc dimethyldithiocarbamate. The article contains physical descriptions, the necessary amounts, the modes of application, the times of application, the action, and other characteristics of the above substances.

ASSOCIATION: none

Card 1/2

L 54849-65

ACCESSION NR: AP5014673

SUBMITTED: 00

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

Card

2/2

NIKIFOROV, A.A.

Fractor "Stalinets-50" 2. izd. Moskva, Gos. izd-vo pul'shoz. lit-ry. 1943. 111 s.
(51-1949a)

FL233.Ch23 1943

LAZAREV, A.A., inzh.; MITSYN, P.V., inzh.; NIKIFOROV, A.A., inzh.;
ROZET, I.Ya., inzh.; SHCHEBINA, V.I., inzh.; DEM'YANOVICH,
A.N., laureat Stalinskoy premii, red.; TIKHONOV, A.Ya.,
tekhn. red.

[Catalog of parts of the "Stalinets-80" tractor] Katalog deta-
lei traktora "Stalinets-80." Moskva, Moskva, Mashgiz, 1953.
(MIRA 16:7)
217 p.

1. Glavnyy inzhener Chelyabinskogo traktornogo zavoda im. Stalina
(for Dem'yanovich). (Tractors—Catalogs)

NIKIFOROV, A.A.

[The "Stalinets-80" tractor] Traktor "Stalinets-80." 3. izd. Moskva,
Gos. izd-vo selkhoz lit-ry, 1954. 275 p. (MLRA 7:12)
(Tractors)

Nikiforov, A.A.
LAZAREV , A.A., inzhener; MITSYN , P.V., inzhener; NIKIFOROV , A.A., inzhener; ROZET , I.Ye., inzhener; MAMONTOV, Ye.V., inzhener, redaktor; STUPIN, A.K., redaktor izdatel'stva; UVAROVA, A.F., tekhnicheskiy redaktor

[Catalog of S-80 tractor parts] Katalog detalei traktora S-80.
Izd. 2-oe, ispr. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 225 p. (MIRA 10:4)

1. Chelyabinskiy traktornyy zavod, Chelyabinsk.
(Tractors--Apparatus and supplies--Catalogs)

LAZAREV, Anatoliy Abramovich, inzh.; MITSYN, P.V., inzh.; NIKIFOROV, A.A., inzh.;
ROZET, I.Ya., inzh.; MAMONTOV, Ye.V., inzh.; KOBILYAKOV, L.M., red.;
GOR'KOVA, Z.D., tekhn.red.

[Manual on the operation of S-80 and S-100 tractors] Rukovodstvo
po ekspluatatsii traktorov S-80 i S-100. Pod red. E.V.Mamontova.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1957. 357 p. (MIRA 11:1)
(Tractors)

KAV'YAROV, I.S., inzh.; LAZAREV, A.A., inzh.; NIKIFOROV, A.A., inzh.;
ROZET, I.Ya., inzh.; VOTYETSKIY, G.P., inzh., red.; KASPEROVICH,
N.S., inzh., red.izd-va; UVAROVA, A.F., tekhn.red.

[Catalog of spare parts for S-80 and S-100 tractors] Katalog
zapasnykh chastei traktorov S-80 i S-100. Moskva, Gos.nauchno-
tekhn.izd-vo mashinostroit.lit-ry, 1959. 230 p.

(MIRA 14:4)

1. Chelyabinskiy traktorny zavod, Chelyabinsk. 2. Otdel glavnogo
konstruktora Chelyabinskogo traktornogo zavoda (for Kav'yarov,
Lazarev, Nikiforov, Rozet).
(Tractors--Catalogs)

NIKIFOROV, Aleksandr Arkad'yevich; KRYUKOV, V.L., red.; PEVZNER, V.I.,
tekhn.red.

[Handbook for S-80 and S-100 tractors] Spravochnik po traktoram
S-80 i S-100. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 156 p.
(MIRA 13:5)

(Tractors)

LAZAREV, Anatoliy Abramovich, inzh.; MITSYN, P.V., inzh.; NIKIFOROV, A.A.,
inzh.; ROZET, I.Ya., inzh.. Prinsipali uchastiye: ZLOTNIK, M.I.,
inzh.; MAGARILLO, B.L., inzh.. KAV'YAROV, I.S., inzh., red.;
TRASHUTIN, I.Ya., inzh., red.; KOBLYAKOV, L.M., red.; PEVZNER,
V.I., tekhn.red.

[Manual for operating the S-100 tractor] Rukovodstvo po eksplua-
tatsii traktora S-100. Pod red. I.S.Kav'iarova i I.IA. Trashutina.
Moskva, Gos.isd-vo sel'khoz.lit-ry, 1960. 263 p. (MIRA 13:5)
(Tractors)

LAZAREV, A.A., inzh.; MITSYN, P.V., inzh.; NIKIFOROV, A.A., inzh.;
ROZET, I.Ya., inzh.; KRYUKOV, V., red.; BALLOD, A., tekhn.
red.

[Dismantling and assembling the S-100 tractor] Razborka i
sborka traktora S-100. Moskva, Izd-vo sel'khoz. lit-ry,
zhurnalov i plakatov, 1962. 231 p. (MIRA 15:4)

1. Chelyabinskiy traktornyy zavod (for Lazarev, Mitsyn,
Nikiforov, Rozet).
(Tractors—Maintenance and repair)

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; NIKIFOROV, A.A.

Interaction of cyclic acetals with thiophenol. Zhur.ob.
khim. 34 no. 5:1686-1687 My 1964. (MIRA 17:7)

1. Irkutskiy institut organicheskoy khimii Sibirskogo
otdeleniya AN SSSR.

NIKIFOROV, P.P.

DELEKTORSKIY, N.V.; NEUGODOV, P.P.; NIKIFOROV, A.A.

Producing pyramidon at a greater rate. Med. prom. 11 no.2:46-49
F '57 (MLRA 10:4)

1. Khimiko-farmatsevticheskiy zavod "Akrikhin."
(AMINOPYRINE)

VIKIFORD, A. A.

1-7200 AEC-11-2921 57

5
1-4E2C

Chem
PhD

REDUCTION OF NICKEL BY HYPOPHOSPHITE. I. FORMATION CONDITIONS AND SOME PLATING PROPERTIES. II. PROBLEMS OF THE REACTION MECHANISM. K. M. Gorbunov and A. A. Nikiforov. Translated from Zhur. Fiz. Khim. 24, 887-901 (1947). 21p.

The process of chemical nickel reduction from solutions containing hypophosphite resulting in the formation of dense brilliant platings of arbitrary thickness on surfaces catalyzing this reaction is studied in great detail. The material compiled up to the present characterizing conditions of this complex catalytic reaction may be considered on the basis that the first step of the process is a hypophosphite decomposition with formation of atomic H which reduces Ni. The parallel reactions occur forming molecular H leading to its evolution in a gaseous form and the reaction of atomic H on hypophosphite with the formation of elemental P which interacts with Ni in its formation process. (auth)

up

PM RB

KUZNETSOV, N. V.; B'RNASHOVA, T. D.; NIKIFOROV, A. A.; KEYKO, N. A.

Synthesis of glyoxal and glycolic acid. Izv AN SSSR Ser Khim
no. 4:692-695 Ap '64. (MIRA 17:5)

1. Irkutskiy institut organicheskoy khimii AN SSSR.

NIKIFOROV, A.D.

DVORKIN, M.D.; NIKIFOROV, A.D.; RUDOMETKIN, V.I.

Closed, horizontally cylindrical and semicircular heads on steel
castings. Lit. proizv. no.3:24-26 Mr '58. (MIRA 11:4)
(Founding)

AUTHOR: Nikiforov, A.D., Engineer DOK-28-54-A-21/35

TITLE: Bases of Planned Standards for Metric Threads [osnovy pro-
yektov standartov na metricheskuyu rez bu]

PERIODICAL: Standartizatsiya, 1958, Nr 4, pp 69 - 73 (USSR)

ABSTRACT: By taking into account recommendations made by the Inter-
national Organization of Standardization, plans for new
standards on metric threads from 0.25 - 0.9 mm were devel-
oped in order to replace GOST standards 3196-46, 3197-46,
and 3198-46. Two of the most usual screw types are des-
cribed and a new system of thread tolerances (MG-25 -
MG-9 mm) is suggested. The recommended thread profile
with an angle of $\alpha = 60^\circ$ and a plane cut by the inner nut
diameter equal to $\frac{t}{4}$ has considerable technological ad-
vantages and increases the screw strength. There are 5
tables and 3 diagrams.

ASSOCIATION: MVTU imeni Baumana (MVTU imeni Bauman,

1. Screw threads--Standards

Card 1/1

NIKIFOROV, A. D. Cand Tech Sci -- (diss) "Study of the parameters and precision of metric threads of clockworks." Mos, 1959. 17 pp; 1 sheet of diagrams (Min of Higher and Secondary Specialized Education RSFSR. Mos Order of Lenin and Order of Labor Red Banner Higher Tech School im Bauman), 120 copies (KL, 46-59, 138)

YAKUSHEV, A.I.; NIKIFOROV, A.D.

Investigating the precision and strength of screw threads having
a diameter up to 1 mm. Nauch. dokl. vys. shkoly; mash. i prib.
no.159-170 '59. (MIRA 12:12)

(Screw thread)

NIKOLAYEV, A. D.

PHASE I BOOK EXPLOITATION

SOV/4438

Vzaimozamenyayemost' i tekhnicheskiye izmereniya v mashinostroyenii; mezhpvuzovskiy sbornik, no. 2 (Interchangeability and Engineering Measurements in Machinery Manufacture; University Collection, No. 2) Moscow, Mashgiz, 1960. 542 p.
Errata slip inserted. 5,000 copies printed.

Ed.: A.I. Yakushev, Doctor of Technical Sciences, Professor; Editorial Council:
A.I. Yakushev (Chairman); B.A. Tayts, Doctor of Technical Sciences, Professor;
Ye. I. Volodin, Docent; N.N. Ganchev, Docent; P.N. Goberman, Docent; and O. Ya.
Yegor'yev (Scientific Secretary), Engineer; Reviewer: M. Ye. Yegorov, Doctor
of Technical Sciences, Professor; Eds.: B.A. Tayts; V.P. Korotkov, Candidate
of Technical Sciences, Docent; L.N. Vorontsov, Candidate of Technical Sciences;
Managing Ed. for Literature on Machine and Instrument Construction (Mashgiz):
N.V. Pokrovskiy, Engineer; Ed. of Publishing House: G.F. Kochetova; Tech. Ed.:
T.F. Sokolova.

PURPOSE: This collection of articles is intended for scientific and technical personnel dealing with problems of interchangeability and engineering measurements in the machine and instrument industries.

Card 1/7

Interchangeability and Engineering Measurements (Cont.) SOV/4438

COVERAGE: The book deals with the results of theoretical and experimental investigations of interchangeability of standard conjugated machine parts and the criteria for selecting the accuracy of measuring devices and for designing instruments for engineering measurements. Methods for analyzing automatic machine tools, transfer machines, and means of feedback control of the dimensions of parts in process are discussed in detail. Methods based on the use of optically interfering screens and radioactive isotopes are included in the discussion. No personalities are mentioned. References accompany several of the articles.

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Card 2/7	

Interchangeability and Engineering Measurements (Cont.)	SOV/4438	
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Card-3/4

NIKIFOROV, A. D., inzh.

System of tolerances for screw threads used in watch mechanisms.
Vzaim. i tekhn.izm v mashinostr.; mezhvuz. sbor. no. 2:59-75 '60.

(MIRA 13:8)

(Screw threads)

(Tolerance (Engineering))

S/028/60/000/012/005/007
B027/B058

AUTHOR: Nikiforov A. D.

TITLE: Tools for Metric Thread Cutting up to 1 mm Diameter

PERIODICAL: Standartizatsiya. 1960. No. 12. pp. 35 - 38

TEXT: ГОСТ 8859-60 (ГОСТ 8859-60): Machine Thread Cutter for Metric Thread With Diameters of 0.25 - 0.9 mm, Valid as From July 1, 1961, ГОСТ 8860-60 (ГОСТ 8860-60): Screw Dies for Metric Thread With Diameters of 0.25-0.9 mm Valid as From July 1, 1961. These new standards for thread cutters and screw dies warrant an increased resistance of the tool through proper selection of its form, material hardness after heat treatment, and inner and outer diameters. For the cone of the gear cutter, which is a most important part, various rake angles are provided, i.e.: 14° for open holes and 23° for blind holes. The material specified is carbon steel of the types 411A (U11A) and 412A (U12A) according to ГОСТ 1435-54 (ГОСТ 1435-54). The following demands are made on the material: 1) High torsional strength. 2) Slight dimensional changes after heat treatment, if the thread is not

Card 1/3

Tools for Metric Thread Cutting up
to 1 mm Diameter

S/028/60/000/012/005/007
B027/B058

ground. 3) Plastic flexibility. Two hardness ranges are specified after heat treatment: 60-62 RC for threads from steel of the type 4708, 410A (U708, U10A) and others at $\sigma_B > 70 \text{ kg/mm}^2$ (σ_B denotes tensile strength). 57-59 RC for threads from German silver, brass and others at $\sigma_B < 60 \text{ kg/mm}^2$. ✓

The smallest outer diameter is standardized so that the lowest torque may develop during thread cutting. The mean diameter is determined by tolerance values. ГОСТ 8860-60 (GOST 8860-60) refers to round, closed screw dies. The material for these dies is carbon steel of the type 411A, 412A (U11A, and U12A); its hardness after heat treatment is 60-62 RC. The smallest outer diameter of the screw die equals the nominal outer diameter of the main thread. The largest mean diameter equals the smallest mean diameter of the ring gauge. Thread cutters are tested with steel of the type 410A (U10A) or brass of the type Л63-3Т (LS 63-3T). The total length of the thread out is 25 to 50 mm. When using the cutting tool made according to ГОСТ 8859-60 (GOST 8859-60) and ГОСТ 8860-60 (GOST 8860-60) at the Pervyy moskovskiy chasovoy zavod (First Moscow Watchmaking Plant) and the Vtoroy moskovskiy chasovoy zavod (Second Moscow Watchmaking Plant), it

Card 2/3

Tools for Metric Thread Cutting up
to 1 mm Diameter

S/028/60/000/012/005/007
B027/B058

was established that it is of high resistance and warrants the accuracy
of threads according to GOST 9000-59 (GOST 9000 59). There are 2 figures

✓

Card 3/3

NIKIFOROV, A.D.

Establishing allowances for standard parts of chemical apparatus.
Standartizatsiia 28 no.8:13-16 Ag '64.

(MIRA 17:11)

NIKIFOROV, A.D., kand.tekhn.nauk

New system of allowances for metric screw threads with a
diameter up to 1 mm. Priborostroenie no.6:26-28 Je '61.
(MIRA 14:6)
(Screw threads, Standard)

NIKIFOROV, Anatoliy Dmitriyevich, kand. tekhn. nauk, dots.;
KARNEYEV, V.A., red.; VORONINA, R.K., tekhn. red.

[Precision and technological processes of the machining
of metric threads] Tochnost' i tekhnologiya izgotovleniya
metricheskikh rez'b. Moskva, Gos.izd-vo "Vysshaya shkola,"
1963. 179 p. (MIRA 16:7)
(Screw cutting) (Screw thread rolling)

L 23662-66 T/EWP(t) IJP(c) JD

ACC NR: AP6012800

SOURCE CODE: GE/0030/66/014/002/0391/0402

AUTHOR: Nikiforov, A. E.; Cherepanov, V. I.

53

ORG: Ural State University, Sverdlovsk

5

TITLE: Theory of the ^{2/}optical spectrum of ion pairs of 3d³ iron-group
impurities in crystals ₁₆ ²¹

SOURCE: Physica status solidi, v. 14, no. 2, 1966, 391-402

TOPIC TAGS: optic spectrum, crystal impurity, impurity ion, dipole interaction, ruby

ABSTRACT: A calculation is made of the energy spectrum of impurity ion pairs with 3d³ configuration in crystals. The optical spectrum of these crystals is interpreted by assuming that a large part of the low-symmetry crystalline field acts on the impurity ion, the electric-dipole interaction is taken into account. The case of ruby (Cr³⁺:Al₂O₃) is treated in detail as an example. The results are compared with experimental data. The authors are grateful to V. B. Fedorov for his courtesy in supplying details on the structure of corundum. Orig. art. has: 2 figures, 1 table, and 17 formulas. [Author's abstract] [KS]

SUB CODE: 20/ SUBM DATE: 19Jan66/ ORIG REF: 005/ SOV REF: 001/

Card 1/1 ₁₆ OTH REF: 010/ ₂

NIKIFOROV, A. F.

Voprosy ekonomiki derevobrabatывающей promыshlennosti SSSR /Problems of
economics in the wood-processing industry of the U. S. S. R. / Moscow,
Gosstatizdat, 1952. 170 p.

SO: Monthly List of Russian Acquisitions, V 16 No 4, July 1953

NIKIFOROV, A.F.; UVAROV, V.B.; LEVITAN, Yu.L.; SAMARSKIY, A.A., prof.,
otv. red.; ORLOVA, I.A., red.; POPOVA, N.S., tekhn. red.

[Tables of Racah coefficients] Tablitsy koeffitsientov Raka.
Moskva, Vychislitel'niy tsentr AN SSSR, 1962. 319 p.
(Quantum theory) (MIRA 15:5)

SHERDAKOV, N.I., dotsent; GORYACHEVA, Ye.M., starshiy prepodavatel';
NIKIFOROV, A.F., dotsent; STEFANOV, D., prof.;
TAL'MAN, P.N., dotsent

Discussing general biological problems. Nauch. trudy LTA
no.99:117-120 '62. (MIRA 17:1)

1. Zaveduyushchiy kafedroy dialekticheskogo i istoricheskogo materializma Leningradskoy ordena Lenina lesotekhnicheskoy akademii imeni Kirova (for Sherdakov).
2. Kafedra dialekticheskogo i istoricheskogo materializma Leningradskoy ordena Lenina lesotekhnicheskoy akademii imeni S.M. Kirova (for Goryacheva).
3. Vsesoyuznyy zaochnyy lesotekhnicheskii institut (for Nikiforov).

NIKIFOROV, Arnol'd Fedorovich, laureat Leninskoy premii; FAYNBOYM,
I.B., red.

[Mathematical analysis] Matematicheskiy analiz. Moskva,
Izd-vo "Znanie," 1965. 47 p. (Novoe v zhizni, nauke,
tekhnike. IX Seriya: Fizika, matematika, astronomiya, no.3)
(MIRA 18:3)

L 8333-66 EEC(k)-2/EWA(b)/EWT(1)

ACC NR: AP5025763

SOURCE CODE: UR/0286/65/000/018/0130/0131

AUTHORS: Bogdanov, Yu. V.; Kislova, V. F.; Molchanov, V. N.; Abramtsev, Ye. P.;
Shishorin, V. A.; Popov, P. I.; Nikiforov, A. F.

30
B

ORG: none

TITLE: A discrete contactless ²⁵phase-sensitive pickup, Class 74, No. 174962
announced by Kuznetsk Scientific Research Coal Institute (Kuznetskiy nauchno-
issledovatel'skiy ugol'nyy institut)

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 130-131

TOPIC TAGS: phase meter²⁵, magnetic circuit, magnet

ABSTRACT: This Author Certificate presents a discrete contactless phase-sensitive pickup consisting of a fixed toothed magnetic circuit with control windings and a moving magnetic circuit without windings. In order to simplify the pickup and to obtain an unambiguous signal pickup, two readout windings are situated on two external teeth of the fixed magnetic circuit (see Fig. 1). The moving magnetic circuit, which is connected to the moving object, is equipped with one readout tooth.

UDC: 621.083.8:62-503.83

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ACC NR: AP5025763

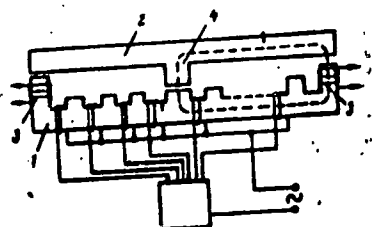


Fig. 1. 1 - Fixed toothed magnetic circuit;
2 - moving magnetic circuit;
3 - readout windings;
4 - readout tooth.

Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 07Jul64

jw

Card 2/2

NIKIFOROV, A. F.

USSR/Medicine - Cytology

Card 1/1 Pub. 22 - 35/40

Authors : Nikiforov, A. F.

Title : Fission of nerve cells

Periodical : Dok. AN SSSR 99/2, 315-316, Nov 11, 1954

Abstract : The upper cervical sympathetic nodes of an adult cat during normal state and during the incision of the preganglionic fibers were investigated to determine the role and value of nerve cell fission on the physiological regeneration in the field of extremities and constant auto-regeneration of the Nissl substance in processes of rejuvenation of nerve tissues. Various stages of amitotic fission of the sympathetic nerve cells are described. The results obtained are listed. Thirteen references: 10-USSR and 3-German (1873-1953). Illustrations.

Institution : The I. V. Stalin Second State Medical Institute, Moscow

Presented by: Academician A. I. Abrikosov, June 7, 1954

NIKIFOROV, A. F.

"Reaction of the Sensory and Motor Neurons when Their Connections are Disrupted.
(In The Case of Neurons of the Ganglion Nodosum and Ganglion Cervicale Superius)."
Second Moscow State Med Inst imeni I. V. Stalin, Moscow, 1955
(Dissertation for the Degree of Candidate of Medical Sciences)

30: Knizhnaya Letopis', No. 32, 6 Aug 55

NIKIFOROV, A.F.

Reaction of neurons of the upper jugular ganglion following
the transection of the sympathetic nerve in the neck. Dokl.
AN SSSR 112 no.3:536-537 Ja '57. (MLBA 10:4)

1. Vtoroy moskovskiy gosudarstvennyy meditsinskiy institut im.
I.V. Stalina. Predstavleno akademikom N.N. Anichkovym.
(NERVOUS SYSTEM, SYMPATHETIC)

USSR / Human and Animal Morphology (Normal and Pathological). The Peripheral Nervous System. S-2

Abs Jour: Ref Zhur-Biol., No 10, 1958, 45549

Author : Nikiforov, A.F.

Inst : As USSR

Title : Reaction of the Sensory Neuron to the Cutting of Its Dendrites.

Orig Pub: Dokl. AN SSSR, 1957, 112, No 4, 760-762.

Abstract: In cutting the vagus nerve of cats lower or higher the ganglion nodosum, a retrograde degeneration develops. Thus, the sensory neuron responds monotypically to the injury of the peripheral and central dendrites. However, the regeneration takes place more rapidly after the cutting of the vagus nerver higher the g. nodosum. The different speed of the recuperative processes depends upon

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USSR / Human and Animal Morphology (Normal and S-2
Pathological). The Peripheral Nervous System.

Abs Jour: Ref Zhur-Biol., No 10, 1958, 45549

Abstract: the size of the mass of the amputated substance
of the neuron. -- K. G. Shchitkov

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NIKIFOROV, A.F.

Reaction of the Golgi apparatus of a sensory neuron following section
of its peripheral segment. Zhur.nevr.i psikh. 59 no.10:1248-1250 '59.
(MIRA 13:3)

1. Kafedra gistologii (zaveduyushchiy - prof. G.K. Khrushchov) II
Moskovskogo meditsinskogo instituta.
(GOLGI APPARATUS physiol.)

89030

S/020/60/135/004/036/037
B016/B066

17 2550

AUTHOR: Nikiforov, A. F.

TITLE: Effect of Radiation on the Regeneration Processes in a
Tissue Culture

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 4,
pp. 984-986

TEXT: The author studied the posttraumatic regeneration of a tissue culture after irradiation with differently high doses and on fixation in different points of time after irradiation. The experiments were carried out on the heart of fowl embryos on the 9th - 11th day of incubation. The hearts were cultivated in a medium of fowl embryo extract with plasm of the cock. A sector was cut out from the 2 days old cultures, which consisted of a maternal piece with the adjacent zone of growth. Irradiation took place immediately after the operation, with γ -rays of Co^{60} in the ГУБЭ-800 (GUBE-800) apparatus. The following doses were applied: 500, 1000, 5000, 25 000, 50 000, 100 000, and 200 000 r at an intensity of 514 r/min. The cultures were fixed and stained either immediately or 6,

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24, and 48 h after the irradiation according to Maksimov (not explained in the text). In the nonirradiated control cultures the author could not detect any cells immediately after applying the defect, but already after 8 h fibroblasts which migrate from the maternal piece may form 3-6 rows (Fig. 1a). In this manner also the defect is filled up. The first indication of a tissue reaction upon irradiation is the suppression and disturbance of the mitotic cell activity. The highest dose at which the author could still observe irregular mitoses, was 25 000 r. In the fibroblasts which are in interkinesis numerous fat vacuoles of different size are formed. So-called nuclear buds are formed on the cell nuclei. At doses of 50 000 - 100 000 r the fibroblasts are destroyed still during the irradiation. This is confirmed by a large amount of cell detritus, occurring in addition to cells which are found in different stages of decomposition. On application of 200 000 r the area of the defect was in all cases free of cell constituents (Fig. 2b). The author concludes that two types of degeneration could be observed: 1) cell clasmatosis, 2) the cell nuclei become pyknotic and the cytoplasm cannot be stained any longer. The data of some scientists, according to which doses of 1000-2000 r or even of 75-100 r are lethal for tissue cultures (Refs. 4-6) are in

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contradiction with his results. According to his own observations only doses of 100 000 - 200 000 r are lethal for heart cultures of fowl embryos. At doses below 50 000 r the migration intensity of the cell constituents in the area of the defect does not differ from that of the control culture (except some particular cases). From doses of 50 000 r onwards a distinct suppression of the capacity of reproduction of the tissue sets in. At 200 000 r the posttraumatic regeneration is completely lost. The study was carried out in the Institut morfologii zhivotnykh AN SSSR (Institute of Animal Morphology of the AS USSR). There are 2 figures and 7 references: 3 Soviet, 2 US, 1 French, and 1 German. X

ASSOCIATION: Institut eksperimental'noy biologii i meditsiny Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Experimental Biology and Medicine of the Siberian Department of the Academy of Sciences USSR)

PRESENTED: May 27, 1960, by I. I. Shmal'gauzen, Academician

SUBMITTED: May 20, 1960

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Legend: Fig. 1 - Area of the defect 8 h (a) and 24 h (b) after the damage; control Fig. 2 - the same area 24 h after irradiation with 100 000 r (a) and 48 h after irradiation with 200 000 r (b).

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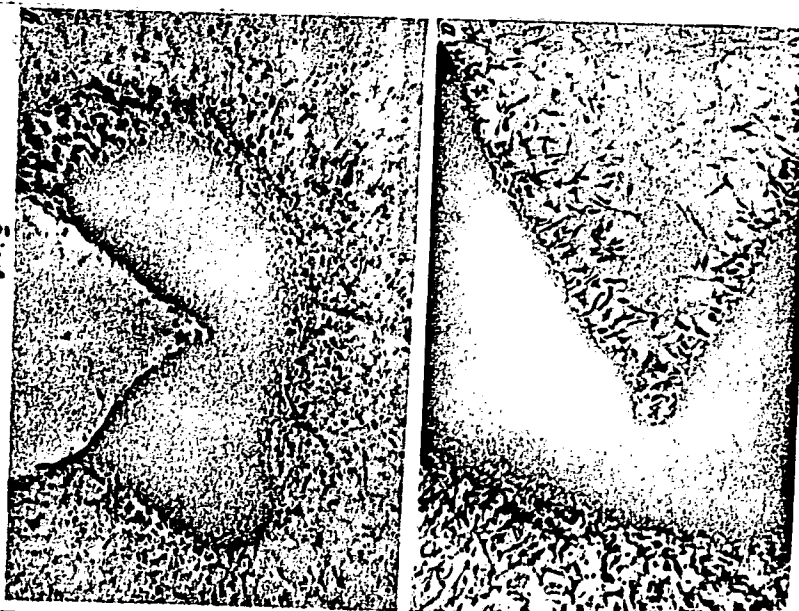
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22677
S/200/61/000/001/003/005
D223/D305

AUTHOR: Nikiforov, A. F.

TITLE: The reaction of connective tissue and its regenerating
faculties in vitro during the action of penetrating
radiation

PERIODICAL: Akademiya nauk SSSR. Sibirskoye otdeleniye. Izvestiya,
no. 1, 1961, 82-91

TEXT: This article was based on investigations done at the Institut morfologiya zhivotnykh im. A. N. Severtsova, AN SSSR (Institute of Animal Morphology im. A. N. Severtsov, AS USSR). The author surveys Soviet and foreign publications dealing with the effects of radiation on the organism as a whole and on individual tissues, as well as with methods of tissue cultures in vitro. He points out that although all investigators conclude that lethal radiation doses for tissue cultures are much larger than those needed for entire organism irradiations, quantitative data varies considerably according to the investigator. Sometimes the lethal radiation doses are given in the range of 100,000 - 200,000 r, (Ref. 41: A. N. Stro-
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The reaction of connective tissue...

nd, A. M. Brues, Radiation effects in tissue culture. Texas Rep. Biol. and Med. vol. 12, No 4, 1954), (Ref. 48: L. Halberstaedter, L Doljanski, Radiobiologische Untersuchungen an Gewebekulturen. Arch. exp. Zellforsch. Bd. 19, 1937), (Ref. 49: G. Goldhaber, L. Doljanski, Radiobiologie studies on tissue culture. I. The immediate effect of x-rays on cell ontgrowth in cultures of fibroblasts. Growth. vol. 6, 1942), others in the range of 1,000 - 2,000 r (Ref. 27: H. Vollmar, B. Rajewski, Mikrokinematographische Studien über die Wirkung von Röntgenstrahlen auf normalen und Tumorzellen in Gewebekulturen. Strahlentherapie, Bd. 60, Hf. 3, 1937), (Ref. 50: T. R. Reid, M. P. Gifford, A quantitative study of the effects of x-radiation on cells in vitro. J. nat. Canc. Inst. vol. 13, No 2, 1952), (Ref. 30: M. Trabert van der Moesen, J. Frederic, Contribution a l'étude de l'action des rayons x sur des fibroblastes cultivés in vitro Comptes rendus des séances de la société de biologie et de ses filiales. T. 151, No 8-9, 1957), some as low as 75 - 100 r (Ref. 51: T. T. Puck, D. Morkovin, P. T. Marcus, S. F. Cieciura, Action of x-ray single mammalian cells in vitro. J. exp. Med. vol. 106, No 4, 1957). The same differences exist in data on the lowest
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irradiation doses affecting tissue morphology. In the author's opinion these discrepancies may be partially explained by different experimental conditions, especially by the different time-rate of irradiation and by the fact that most experiments were carried out immediately after the tissue was put in vitro. In such circumstances, the irradiated tissues were not yet adapted to new life conditions and if they happened to suffer some injuries during the transfer, these could not be distinguished from those caused by irradiation. The purpose of the author's experiments was to study the unfavorable effect of radiation on the regenerating properties of mutilated tissue and to observe differences in the reaction to irradiation between mutilated and sound tissue. For cultures in vitro, the heart connective tissue of chicken embryos, 9 - 11 days old, were chosen. The culture medium consisted of a mixture of chicken fetal extract of the same age and of cock's plasma, diluted with redistilled water 1:1. Experiments were carried out at 37°C. After two days in vitro the samples developed an area of growing new fibroblasts, having a typical well-defined, mainly oval shaped nucleus and one or two nucleoli. Their cytoplasm was free from

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vacuoles. Then a small section [Abstracter's note: No dimensions given] of the culture was cut out, consisting of a piece of mother tissue and a piece of adherent newly grown tissue; the mutilation was performed under a binocular stereoscopic microscope so that a sector between the "mother tissue" and the "new growth zone" was formed; the mutilated cultures were rinsed in a Ringer solution for 5 minutes, moistened with a culture medium and put in a camera. [Abstracter's note: No description given]. Immediately afterwards, the cultures were subjected to irradiation with CO^{60} γ -rays in the apparatus GUBE-800 [Abstracter's note: No description given] with 500, 1000, 5000, 25,000, 100,000 and 200,000 r at a time rate of 514 r/min. This experimental method has two advantages: 1) Only cultures with well developed new growths are studied, the defective ones being eliminated from further examination; 2) It allows observation and comparison of the same sample of cell behavior in the mutilated area as well as that of cells in the unimpaired zone. The cultures were fixed by the Maksimov method [Abstracter's note: No description given] either immediately after irradiation or 6.

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24, and 48 hours afterwards; the dye used was hemalaun and eosin. 369 cultures were studied, 247 irradiated and 122 non-irradiated ones, the latter serving for control purposes. The regenerating process of control samples ran as follows: filling the cut-out area began after 2 - 3 hours; after 6 hours the incision side of the "mother tissue" showed 4 - 7 layers of new fibroblasts; after 8 - 10 hours the area was filled with loosely fitted fibroblasts, few of them showing mitosis activity; the incision side of the "new growth zone" was still free from fibroblasts. After 24 - 48 hours the whole area was filled with new cells. Concurrently, in "new growth zone" normal mitosis was observed in most cells, and a few fat vacuoles as well; macrophage and abnormal mitosis was almost absent. All observations show that filling the cut-out area mainly occurred by cell migration from the "mother tissue". In the irradiated cultures, the regenerating process was hindered, and depended on the intensity of irradiation. Low doses (500, 1000, 5000 r) abated the mitotic activity only temporarily, but its recovery never reached the control levels. With higher irradiation doses, abnormal mitosis was observed with deformed chromosome

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structures. The highest dose when abnormal mitosis was still present was 25,000 r, after which it ceased completely. Apart from mitosis abatement, morphologic changes of cells were observed. Immediately, or 6 hours after irradiation with 500 r, no changes were seen; they were observed only 24 hours afterwards, and were represented by numerous small and large fat vacuoles in the cytoplasm of a few fibroblasts [Abstracter's note: Mostly in the "new growth zone"], protoplasmatic swellings and few cell cleavages. With irradiations in the range of 1000 - 2000 r the cell degeneration symptoms were more pronounced and showed in a shorter time after irradiation; after 24 - 48 hours the number of disintegrating cells decreased, but the intercellular space was filled with detritus of broken cells. At these and still higher doses changes in nucleoli shape were observed: They very often became irregular: long, thin and twisted. With doses of 25,000 and 50,000 r photographs taken immediately or some time after irradiation showed different stages of fibroblast disintegration and a very large quantity of detritus. This was observed mainly in the "mother

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tissue", and in the center of the "new growth zone" on its border, cells with a large number of small and large vacuoles were seen, their volume deforming the shape of the nuclei. The author did not observe the transformation of small vacuoles into large ones; this could mean that their origin is different, but to prove it more investigations are necessary. The fibroblasts in irradiated samples were often spindle-shaped, and nucleus membrane could be dyed intensively, the coloration being unequal along their circumference, while the cytoplasm could be dyed only slightly or not at all. Another characteristic feature of strongly irradiated fibroblasts was the burgeoning of their nuclei: first a swelling on the nucleus side was formed, then it grew larger to a pear shaped bud and finally was severed from the nucleus. All these degenerative changes were much more marked in the "new growth zone" than among cells filling the cut-out area: up to 25,000 r irradiation, no differences were observed in the filling up of this area in irradiated and control samples. Only a few samples showed small differences in the migration from "mother tissue" fibroblasts 48 hours after irradiation. The same was observed after the 50,000 r dose, small differ-

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ences showing after 24 hours. The dose of 100,000 r affected very strongly the tissue regeneration, but even in that case its effect was more marked in the "new growth zone" than in the cut out area. The 200,000 r dose was lethal to the whole culture; only very few fibroblasts survived the irradiation but even these were completely degenerated and unable to produce new cells. Two different modes of cell death were observed; one with the disintegration of nuclei and cytoplasm with resulting large amounts of cell detritus; the other, without cell cleavage, but with solidification of nuclei and with a cytoplasm which could not be dyed. The author points out that his results differ from those of other investigators, who stated that much smaller radiation doses were lethal to tissue cultures (Refs. 50 and 51: Op cit). There are 7 figures and 53 references: 21 Soviet-bloc and 32 non-Soviet-bloc. The references to the four most recent English-language publications read as follows: M. R. Murray, G. Copeck, A. bibliography of the research in tissue culture, Acad. press., New York, 1953; G. F. Whitmore, I. E. Till, Increase of cellular constituents in x-irradiated mammalian cells

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The reaction of connective tissue...

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D223/D305

Biochimica et biophysica acta, vol. 30, No 3, 1958; A. N. Strond,
A. M. Brues, Radiation effects in tissue culture. Texas Rep. Biol.
and Med. vol. 12, No 4, 1954; T. T. Puck, D. Morkovin, P. T. Marcus,
S. F. Cieciura, Action of x-ray single mammalian cells in vitro. J.
exp. Med. vol. 106, No 4, 1957.

ASSOCIATION: Institut eksperimental'noy biologii i meditsiny Sib-
irskogo otdeleniya AN SSSR (Institute of Experimental
Biology and Medicine, Siberian Sector, AS USSR)

SUBMITTED: June 18, 1960

X

Card 9/9

NIKIFOROV, A.F.; NEPOMNYASHCHIKH, G.I.; KREMLEV, N.I.

Autotransplantation of a somatic muscle into the myocardium of a dog. Arkh. anat., gist. i embr. 45 no. 10:36-39 0 '63.

(MIRA 17:9)

1. Laboratoriya eksperimental'noy tsitologii (zav. - starshiy nauchnyy sotrudnik A.F.Nikiforov) i animal'naya laboratoriya (ispolnyayushchiy obyazannosti zaveduyushchego-N.I.Kremlev) Instituta eksperimental'noy biologii i meditsiny Sibirskogo otdeleniya AN SSSR, Novosibirsk. Adres avtorov: Novosibirsk, Sovetskaya ul., 20, Institut eksperimental'noy biologii i meditsiny Sibirskogo otdeleniya AN SSSR, laboratoriya eksperimental'noy tsitologii i animal'naya laboratoriya.

VAN'KO, L.V., STUNZHA, G.S.; NIKIFOROV, A.F.; IGNATOVICH, N.V.

Morphological and cytophysiological changes in the cells of the
deafferented lung. Arkh. anat., gist. i embr. 48 no.2:30-35
F '65. (MIRA 18:8)

1. Laboratorii eksperimental'noy tsitologii (zav. - starshiy
nauchnyy sotrudnik A.F.Nikiforov) otдела eksperimental'noy biologii
i patologii Instituta tsitologii i genetiki Sibirskogo otdeleniya
AN SSSR.

NIKIFOROV, A.G., otvetstvennyy redaktor; POLYAKOV, K.V., professor,
redaktor; ALEKSANDROVA, T.A., dotsent, redaktor; PETROVA, K.I.,
redaktor; BELYANOVA, Ye., redaktor; TEREKHOV, A., redaktor;
VYSHKOVSKIY, D., tekhnicheskiy redaktor

[Natural resources of Kuybyshev Province] Priroda Kuibyshevskoi
oblasti. [Kuibyshev] Kuibyshevskoe obl. gos. izd-vo, 1951. 404 p.
(Kuybyshev Province--Geography) (MIRA 9:8)